



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

*[Handwritten signature]*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,256	08/27/2003	Yoshihiro Nonaka	8031-1028	5218
466	7590	05/03/2005		EXAMINER
YOUNG & THOMPSON				NADAV, ORI
745 SOUTH 23RD STREET				
2ND FLOOR			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22202			2811	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,256	<b>Applicant(s)</b> NONAKA, YOSHIHIRO
	<b>Examiner</b> ori nadav	<b>Art Unit</b> 2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 March 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.  
 4a) Of the above claim(s) 5 and 7-30 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4 and 6 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 27 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/27/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of the embodiment of figure 8 in the reply filed on 03/11/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claim 5 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected embodiment (embodiment of figure 7).

### *Drawings*

Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitations of at least two transistors include first and second transistors respectively placed in the gap between said first and second power supply lines and the gap between said second and third power supply lines formed on the opposite sides of said second power supply line, as recited in claim 1, are unclear as to which element is formed on the opposite sides of said second power supply line.

The claimed limitation of two transistors for changing connections to the power supply lines, as recited in claim 1, is unclear as to how transistors can change the connections to the power supply lines.

The claimed limitation of a power supply line is extended in wiring, as recited in claim 2, is unclear as to what is it meant.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4 and 6, insofar as in compliance with 35 U.S.C. 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Lin et al. (5,777,369).

Regarding claims 1-2 and 6, AAPA teaches in figure 34 and related text a semiconductor integrated circuit comprising at least three power supply lines B33, a34, A32 and at least two transistors 10, 11 for changing connections to the power supply lines, wherein the first second and third power supply lines in said power supply lines are placed in said order and said at least two transistors include first 31 and second 30 transistors respectively placed in the gap between said first B33 and second a34 power supply lines and the gap between said second a34 and third A32 power supply lines,

wherein at least one of said power supply line is extended in wiring to be connected to an external connection terminal,

and wherein said transistors are thin-film transistors formed on a glass substrate or an insulation substrate other than a semiconductor substrate.

AAPA does not teach formed on the opposite sides of said second power supply line. Lin et al. teach in figure 3 and related text first second and third power supply lines in said power supply lines are placed in said order and said at least two transistors include first and second transistors VG1, VG2 respectively placed in the gap between said first and second power supply lines BL28, Vdd and the gap between said second and third power supply lines BL28, Vdd formed on the opposite sides of said second power supply line Vdd.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Lin et al.'s layout in AAPA's device in order to reduce the size of the device.

Regarding claim 4, prior art's device teaches that the area occupied by all of said power supply lines is larger than the area occupied by all of the regions between said power supply lines.

Claim 3, insofar as in compliance with 35 U.S.C. 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Lin et al., as applied to claim 1 above, and further in view of Fujii et al. (6,707,139).

AAPA and Lin et al. teach substantially the entire claimed structure, as applied to claim 1 above, except a mutual connection line for connecting together some of said power supply lines having equal potentials, wherein the mutual connection line is not connected to any of said power supply lines other than those having equal potentials. Fujii et al. teach in figure 8 and related text a mutual connection line for connecting together some of said power supply lines having equal potentials, wherein the mutual connection line is not connected to any of said power supply lines other than those having equal potentials.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a mutual connection line for connecting together some of said power supply lines having equal potentials, wherein the mutual connection line is

not connected to any of said power supply lines other than those having equal potentials, in the device of AAPA and Lin et al., in order to use the device in an application which require power supply lines of equal potentials.

**Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.**

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(571) 272-1660**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**



O.N.  
4/29/05

ORI NADAV  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2800